

QuadRTD and OctRTD

Part Number	QuadRTD	OctRTD
Temperature Sensor	External: 2, 3 or 4 wire 100Ω platinum RTD	
Temperature Range	-200 to +850°C	
Temperature Resolution	0.01°C	
Calibrated Accuracy	±0.1°C	
Memory	21,845/channel	10,922/channel
Sample Rate	2 seconds up to 12 hours	
Channels	4	8
LED Indicator	None	
Required Interface Package	IFC110 or IFC200	
Baud Rate	2,400	
Typical Battery Life	1 year	
Operating Environment	-20 to +60°C, 0 to 95%RH (non-condensing)	
Material	Anodized aluminum	
Dimensions	3.5" x 4.4" x 1.0" (89mm x 112mm x 26mm)	3.5" x 4.4" x 1.5" (89mm x 112mm x 39mm)
Approvals	CE	

Battery Warning

WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 60°C (140°F).

Specifications subject to change.

See MadgeTech's terms and conditions at www.madgetech.com



QuadRTD

4-Channel, 100Ω RTD Based Temperature Data Logger

OctRTD

8-Channel, 100Ω RTD Based Temperature Data Logger

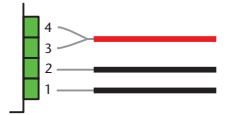
Wiring the Data Logger

Wiring Options

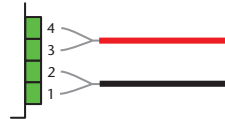
For 4-wire RTD probes, connect the four lead wires to your RTD logger as shown in the figures below.



For 3-wire RTD probes, short inputs 3 and 4 together, then connect the lead wires to inputs 1, 2 and 3.



For 2-wire RTD probes, short inputs 3 and 4 together and inputs 1 and 2 together, then connect the RTD lead wires to inputs 2 and 3.



Warning: Note the polarity instructions. Do not attach wires to the wrong terminals. 100 Ohm, 2 or 4 wire RTD probes are recommended for the most accurate performance. Most 100 Ohm, 3 wire RTD probes will work, but MadgeTech cannot guarantee the accuracy. To determine whether or not the 3-wire RTD probe will work, the resistance between the two same colored wires should be less than 1 Ohm. (Note: Please contact the manufacturer of the RTD probe for questions on the resistance)

Device Maintenance

Battery Replacement

Materials:

3/32" HEX Driver (Allen Key)

Replacement Battery (U9VL-I)

- Remove the cover from the device by unscrewing the four screws.
- Remove the battery from its compartment and unsnap it from the connector.
- Snap the new battery into the terminals and verify it is secure.
- Replace the cover taking care not to pinch the wires. Screw the enclosure back together securely.

Note: Be sure not to over tighten the screws or strip the threads.

Recalibration

The QuadRTD or OctRTD standard calibration is at two points, 50Ω and 150Ω.

Pricing:	QuadRTD	OctRTD
Recalibration traceable to NIST	\$79.00	\$91.00
Recalibration	\$49.00	\$61.00

Additional Services:

Channel (1st)	\$45.00 at custom point
Additional Channels	\$4.50 at custom point
Verification Point	\$15.00 per point

Prices and specifications subject to change. See MadgeTech's terms and conditions at www.madgetech.com

To send the devices back, visit www.madgetech.com, select Services then RMA Process.

Installation Guide

Installing the Interface cable

- IFC200

Insert the device into a USB port. The drivers will install automatically.

- IFC110

Plug the serial cable into the port and verify it is secure.

- USB-1 or USB-101

Install the USB drivers from the CD provided in the kit, then plug the USB cable into the computer and the serial cable into the serial port.

Installing the software

Insert the Software CD in the CD-ROM Drive. If the autorun does not appear, locate the drive on the computer and double click on **Autorun.exe**. Follow the instructions provided in the Wizard.

Connecting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Click the **Communication Menu**, then **Auto Configure Port**.
- After a moment, a box will appear stating that a device has been found.
- Click **OK**. The **Device Status** box will appear. Click **OK**.
- At this point, communications have been configured for your logger. These settings can be found under the **Communication Menu**.

Note: For additional installation instructions refer to your "Data Logger & Software Operating Manual".

Device Operation

Starting the data logger

- Click **Device Menu** then **Start Device**.
- Choose the desired start method.
- Choose the start parameters by selecting a **Reading Rate** suitable for your application.
- Enter in any other desired parameters and click **Start**.
- A box will appear stating the data logger has been started. Click **OK**.
- Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.

Downloading data from a data logger

- Connect the data logger to the interface cable.
- Click the **Device Menu** then **Read Device Data**. This will offload all recorded data onto the PC.